Appln. No. 10/617,305 Preliminary Amdt. dated October 23, 2003

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph spanning page 5 and 6 with the following amended paragraph:

-- Fig. 5 illustrates details of the ideal course of the flutings 7 and 8. Each fluting 7, 8 has a radially projecting head 15 of predetermined constant curvature with a radius of curvature R_K , which is illustrated in a crosssectional view in Fig. 5. The curvature of the fluting head 15 is convex, related to the axes of rotation 5 and 6. At its highest point, the fluting head 15 has a crest 16. Each fluting head 15 is mirror symmetrical in relation to a plane of symmetry, -that extends through the with a respective crest 16 and a respective axis vertically intersects the axes of rotation 5, -and-6 defining that plane of symmetry. Each fluting head 15 is bilaterally defined by a substantially straight flank 17 that reaches approximately from the end of the upper quarter of the height H of the fluting as far as to where the lower quarter of H starts. The flanks 17 are adjoined by a root 18 which is concave, related to the axes of rotation 5 and 6. The root 18 has a predetermined constant curvature of a radius of curvature R_F. The radius of curvature R_K is less than the radius of curvature R_F . This is due to the fact that a gap for accommodation of the corrugated medium 14

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must remain between a fluting head 15 of a fluted roll and a root 18 of another fluted roll. The difference of R_F from R_K depends on the thickness and type of paper and on other parameters; it frequently ranges between 0.1 and 0.8 mm, in particular between 0.28 mm and 0.51 mm. The flutings 7, 8 are parallel to each other, extending over the width of the fluted rolls 1 and 2 in parallel to the axes of rotation 5 and 6 thereof. Furthermore, the flutings 7, 8 are distributed regularly along the circumference of the surfaces of the fluted rolls 1 and 2. The distance of neighboring fluting heads 15 is termed the spacing T. Allocated to each spacing T is an angular pitch ϕ_T made by neighboring fluting heads 15 in relation to the respective axis of rotation 5 and 6. In the case of the fluted rolls 1 and 2, the angular pitch ϕ_T is constant, with the angular pitch of the fluted roll 1 not necessarily being equal to the angular pitch of the fluted The design of the flutings 7, 8 seen in Fig. 5 corresponds to the ideal course in a cylindrical roll without swell. --